



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,852	06/26/2003	Joseph Anthony Holung	RPS9 2003 0080 US1	5825
25299	7590	07/22/2004	EXAMINER	
IBM CORPORATION PO BOX 12195 DEPT 9CCA, BLDG 002 RESEARCH TRIANGLE PARK, NC 27709			STERLING, AMY JO	
			ART UNIT	PAPER NUMBER
			3632	

DATE MAILED: 07/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/606,852

Applicant(s)

HOLUNG, JOSEPH ANTHONY

Examiner

Amy J. Sterling

Art Unit

3632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 4,5,7,8,12,13,16 and 17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,6,9-11,14,15 and 18-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This is the first Office Action for application number 10/606,852, Mechanical Arm and Counterbalance Assembly, filed on 6/26/03. Claims 1-20 are pending.

Election/Restrictions

This application contains claims directed to the following patentably distinct species of the claimed invention:

Species I: Fig. 4A, 4B

Species II: Fig. 5A, 5B

Species III: Fig. 6, 7

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, Claims 1, 9 and 18 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include

all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

During a telephone conversation with Joseph Lally on 7/15/04 a provisional election was made without traverse to prosecute the invention of Species I, Figs. 4A, 4B, claims 1-3, 6, 9-11, 14, 15, 18-20.. Affirmation of this election must be made by applicant in replying to this Office action. Claims 4, 5, 7, 8, 12, 13, 16 and 17 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Information Disclosure Statement

The information disclosure statement submitted on 6/26/03 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 9-11, 14 and 15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 9 recites that the extension link rotates about the link pin and it is unclear from the specification how the extension link is capable of such motion, when the specification teaches otherwise, stating that, "Yoke 150 is constrained to move in a single direction, which is perpendicular to the orientation of the first slot" (Page 4, lines 24 and 25). Rotation movement cannot be considered on direction. The claim was examined as if it recited, that the extension link rotates around the pivot point.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9-11, 14 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recites the limitation "about the link pin" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 3, 9, , 10, 11, 14 and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent No. 5697757 to Lindsay.

The patent to Lindsay discloses a mechanical assembly having an arm (10) connected to and free to rotate about a pivot point (22), a counterbalance link (23) fixedly collinear with the arm (10) and connected to the pivot point (22), a yoke (17) configured to translate back and forth in a first direction, wherein the yoke position tracks the first direction of a free end of the extension link as it rotates about the pivot point, including a first slot (33), parallel to the force of gravity, in which a pin (39) of the counterbalance extension link (23) resides), a force generating device connected between the counterbalance extension link pin and a fixed point on the yoke, which is

used to exert a constant and independent force on the extension link (See Col. 4, lines 14-29, which describes a constant and independent force applying device acting on pin, See also Col. 5 and 6 for a list of examples). Lindsay also discloses wherein the yoke includes a second slot (35) which is perpendicular to the first slot (23) and a pin (37) attached to a fixed reference through the second slot to guide the motion of the yoke as it translates.

Claims 10 and 11 recites the first direction is perpendicular to the force of gravity. In this claim, the first direction is reversed with the second direction as described above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 5697757 to Lindsay as applied to claims 1, 9 and 14 above, and in view of United States Patent No. 6334595 to Stenkvist et al.

Lindsay discloses applicant's basic inventive concept, all the elements which are shown above with the exception that it does not show that the constant force generating device is a spring.

Stendkvist et al. shows a counterbalanced arm with a constant force spring (15), used to apply a constant force on the arm. Therefore, it would have been obvious to

one having ordinary skill in the art at the time the invention was made from the teachings of Stendkvist et al. to have substituted the constant force generating device for a constant force spring, in order to apply a constant force on the arm.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following documents show various counterbalancing assemblies.

6543914 to Stander

6345919 to Chapman

5415057 to Nihei et al.

4943019 to Mester

4849778 to Samuelson

4090685 to Pappas

Any inquiry concerning this communication should be directed to Amy J. Sterling at telephone number 703-308-3271. The examiner can normally be reached (M-F 8 a.m.-5:00 p.m.). If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Leslie Braun can be reached at 703-308-2156. The fax machine number for the Technology center is 703-872-9306 (formal amendments) or 703-308-3519 (informal amendments/communications).

Application/Control Number: 10/606,852

Page 8

Art Unit: 3632

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist at 703-308-2168.



AJS
Amy J. Sterling
7/16/04



ANITA KING
PRIMARY EXAMINER